

# Repository PFT Meeting Notes

## 11/18/04

Present

Harry Ahlers	ACOE
Jeff Johnson	USFS
John Lawson	DEQ
Ed Moreen	EPA
Mike McCurdy	TerraGraphics
John Perfect	IDT
Robbin Simmons	DEQ
Cheryl Gussenhoven	TerraGraphics
David Fortier	BLM
Scott Peterson	DEQ

Cheryl Gussenhoven of TerraGraphics gave a PowerPoint presentation about the Mission Flats Repository site. A brief outline of the presentation follows:

Why this site?

- Access-next to freeway
- Proximity-close to work being performed in the lower basin
- Existing Depression-topographically amenable to this plan
- Available for Purchase-willing private land owner
- Chemistry-the area is already impacted by 12-18 inches of tailings

What does a typical site look like in the upper basin?

- 45,000 cy of available space-small
- 6 mi. up Canyon Creek-not real close to the work we are performing
- 300m to nearest residence-can be right next door

Floodplain evaluation for the East Mission Flats Site

- FEMA (regulatory standard) site in 100y floodplain
- USGS 1996 rain on snow event in floodplain
- U of I model (1996) not in floodplain

Initial Site Investigation Results

- TP #1 Soil Metals Graphs

PFT Observations-need to develop info on the nature and extent of contamination

Site Sample Locations

- ¾" core samples ~ 1 ft below surface water

Engineering Parameters

- Material type for building and stacking material (mass) on top of this area

Biological Considerations

- USAC Wetland Delineation
- Ecological Impact

GW and Subsurface Soils

- No MCL exceedences
- Geoprobe soil sample @ 20 locations
- Increase in PB & ZN to depth of 24" BS

(1,000 mg/kg)

Gussenhoven: Regarding the ground water, didn't find an exceedence of MCL in the groundwater sampled in the wells that were installed. If however we compared those numbers to surface water criteria there were some exceeded aquatic life criteria-this is just a place holder as the surface water criteria should not apply to the wells.

Color charts showing concentrations

Does pretty much follow contours of land  
Highest concentration 0-12"  
Lowest 24-48" BGS

Surface Water Aquatic Life Criteria

Standards for aquatic life  
As, Cd, Zn, Pb  
7 exceeded Zn  
As & Cd relatively low  
Pb & Zn were high

Lawson: Based on the directions from the PFT during the July meeting, we developed a plan to sample the areas that were covered with water. The sampling plan met the objectives which were 1) What is the surface water like? And 2) What was the soil under the water like?

Perfect questioned if higher levels were at the north of south end.

Gussenhoven: There were no exceedences of MCL in the groundwater and three exceedences in the aquatic life criteria.

McCurdy: Were those results total or dissolved?

Gussenhoven: The results were total. The total numbers were worse case so she used those values.

Sediment Analysis Results

As & Cd for 10 locations were low.  
Pb & Zn for the 10 locations were high.

Engineering

Can we use the soil for a topsoil source?  
Consider these concerns: 1)Further analysis regarding construction standards. Will the soil be used for yard remediation or mine site reclamation? 2)Constructability – dewater, time of year construction would occur?

Stability and Consolidation

Below 48" the soil is great  
Above 48" is clay, fine soils which hold water.

Wetland Delineation

USACE jurisdictional boundary

Proposed Footprint ~ 20 acres

John Lawson explained the footprint. The southern most boundaries are delineated by a power line. There is a buffer to the wetland area on the northern boundary. The footprint also basically follows the contour of the land.

## Potential Volumes

<u>Feet</u>		<u>Volume</u>
4	=	110,000
8	=	185,000
12	=	255,000
16	=	320,000

Perfect: Can we use freeway fill as a buttress?

Lawson: We do have power line issues which are right next to the freeway. There are also fiber optic lines and some other easements in that area. Avista can be very specific in their needs for these high wires. We've found that out on the Big Creek Repository.

Perfect: In general, Avista is OK with more cover on fiber optic lines.

Fortier: We may want to leave that treed buffer between freeway and power lines.

Lawson: The final land use is up to the landowner if we take a lease option on this land.

Fortier: A private owner cannot always decide what he wants to do with his own land. If he is putting waste on it there is a public concern and obligation.

Johnson: What are the options?

Gussenhoven: Purchase or lease.

Lawson: Certainly there are issues associated with CERCLA waste on private land, however the ICP will take care of that. It is not correct to assume that all available land uses will be approved through the ICP. Ultimately the landowner will propose a land use and there will have to be an evaluation of the long term use and care for that land. The DEQ and EPA will always have some level of oversight on repositories but there should be flexibility for the landowner.

Fortier: Spoke about BLM purchasing Blackwell Island. Bought and instituted conservation easements left in private ownership.

Fortier: There are problems with land changing hands. Easements will continue on. If you leave in private hands or turn property over, and the owner doesn't pay the taxes, it will be turned over to the County. So that is the hazard in leasing and agreements and such. BLM went through all of this forcing County and Cities to take over. BLM has played the "what if" game into the future.

Gussenhoven: Good considerations may be better to purchase.

Fortier: There are pros and cons to both.

Gussenhoven: If we open up dialog with property owners then we can help them understand the possible long term issues. She spoke about possible scenarios.

Johnson: Who would have long-term oversight?

Lawson: The ICP program would need to be in place and would take over.

Fortier: If ICP is not in place, at least there needs to be an easement in place to establish the responsibilities and controls.

He spoke of zoning and other factors that private land owners should know to see if this is in their best interest.

Moreen: This is a real issue. Superfund regulations say the obligation for O&M lies with the State. ICP is the long term regulatory arm, but doesn't necessarily overlap with O&M. Another component is the 5-year review process. Every remedy must be reviewed.

Fortier: From Fish & Game's perspective, the wetland stuff can be attractive as part of the mitigation.

Lawson: We are looking for parcels for sale, trade, lease or whatever. There are not many parcels/owners so we need to be flexible. We don't want to close doors on anything. For example, the bridge project in Harrison needs a location for a repository. As of today, we don't have a place for them to take the contaminated material.

Fortier: This site has good accessibility.

Gussenhoven: Continues presentation.

Flow chart showing process of siting repository. We are now in Tier 2. There is some overlap in the tiers. Reviewed steps in various stages of completion. These steps come from the ROD's instructions to site a repository.

Lawson: Are the prevailing winds from the west?

Fortier: There is a different wind dynamic in the river channel.

Moreen: At the Box, the prevailing winds were from the west, although that is subject to micro-climates.

Perfect: Thousands of cars drive through which may also influence that dynamic.

Lawson: Fortier has a good point about the treed buffer. No doubt the dust needs to be mitigated.

Gussenhoven: We need to take into account the cost consideration to control and deal with traffic issues.

Perfect: Some argument to damaging ramps but the freeway is built to accommodate big loads.

Perfect: From the DOT's point of view, access control and providing access to where you want to go is a process. The cost for government agencies usually does not change but there will need to be discussions and negotiations in regard to long term access to properties. Specific access agreements have a cost and a value to the landowner. In regard to the matching funds arrangement, the DEQ may want to determine the value of that access for the purpose of State matching dollars. IDT will still want to keep control of that access. Future property owners will see the value in the access off freeway but will need to go to ITD to upgrade that.

Fortier: That should be dealt with up front.

Perfect: To the extent possible, it could be expensive. Another point to consider is that when the freeway was constructed, the southern edge bordered on graveyards. There were graves all along. It wasn't an issue when the freeway was put in place but now it will be different. The graves were mostly Native American.

Fortier: Recommended going to talk to the tribe cultural anthropologist very soon to address this issue.

Perfect: Also, there may be cultural artifacts related to the steamboat that operated from this area to the mining district.

Fortier: Have you found any old railroads or roads? BLM used old maps. The old maps of the Silver Valley showed old mines and mine dumps. They are a good historical record. It may be a way of figuring out the original contours of the land. You can also go back to old photos. The interstate (ITD) drawings will help address these issues.

Lawson: Where do you find those?

Fortier: DOT

Lawson: Are there pre-interstate aerials?

Perfect: Yes, there are some around.

Johnson: We (USFS) have 1932 photos. It was a big flight.

Fortier: ASCS. May be old agriculture photos.

Moreen: That is a good resource. Lawson agreed.

Fortier: The Wallace Library has some of the ITD photos.

Perfect: Wallace has photos of the Wallace stuff. The original photos are in our office. They would be in our project development section. Start with Jim Rulletto.

Fortier: Regarding wells. Did you go and check groundwater levels later on? Does it confirm what you thought?

Gussenhoven: Yes, the gradient is N to S. The area near the freeway is less certain.

Fortier: He has questions about culverts. He remembered a problem with Whiteman in the past.

Fortier and Johnson: Did you cross check surface water vs. groundwater elevations?

Gussenhoven: No.

Fortier: It would help correlate the levels.

Johnson: With regards to the footprint, how far is it to groundwater.

Gussenhoven: Five to 7 feet in early October.

Fortier: That would be low table. It needs to be rechecked in spring as well.

Gussenhoven: We need to decide how to deal with that.

Fortier: How high the water comes up is important for stability levels.

Gussenhoven: I anticipate an impermeable barrier underneath to prevent leaching.

Fortier prefers GCL liners.

Lawson: We looked when the sampling was done to see if the lower soils are mottled .

Fortier: Have you seen tailing delineation?

Lawson: Fine deposition soils have lower iron so you don't see the mottling that you might otherwise.

Fortier: It might be worth getting a data logger. They are under \$1,500.

Johnson: I just purchased four for \$2,400.

Fortier: Is it possible to use surface and groundwater loggers? I think you should look at surface and groundwater levels. You might try changing the design.

Gussenhoven: We need to look at liners. In Prichard, we maintained a ten-foot buffer to groundwater but that is not possible on this site.

Moreen to Johnson: Did the USFS use a Liner at Moon Creek.

Johnson: No. We used a geo cell ag grid built on top of saturated tailings. All went well-no problems. No liner but we ran a groundwater channel system and cross drains. There is a sampling port surrounded by French drains. Moon Creek had some technological feasibility issues that needed to be resolved and ultimately they were. Certainly a repository was less desirable in flood plain but there wasn't any other place to take it and we were able to cover the tailings in the drainage. There is no liner on top but there is a cover. The sample port has been dry when checked.

Lawson: I spoke with Dan Audet of Idaho Fish and Wildlife. He indicated that with regards to their ownership of the wet portion of this property, if they don't own it, they don't want it.

Lawson. I would like to look at and talk with people about going to the north. We could offer some kind of mitigation with yard soils and put that out there. It will help with diving ducks and other wildlife. Can we talk to Fish & Game about that?

Perfect: From the ITD's perspective, when we want to put a repository on land we provide stewardship form, it is an issue of a lack of managerial experience with these things. As for this project, what is the projected long term use for this? I wouldn't feel comfortable with local management.

Lawson: That is where the ICP comes in with long term funding in perpetuity. Cover must be in place. If not then it must be replaced.

Fortier: What about Brownfield's? Can you build State and ITD facilities on that?

Discussion ensued.

Fortier: Maybe we can use it to build a museum for the tribe or mission, etc. Or to build buildings for ITD.

Moreen: EPA is prohibited from using monies to implement remedies for which there are Superfund monies, that includes repository construction and operations.

Fortier: He was thinking more about using Brownfield money to develop after the repository was capped.

Lawson: We can bring that up to the State's Brownfield people.

Fortier discussed further.

Lawson asked for recommendations for the next phase. He would like Cheryl Gussenhoven to present this information to the TLG and have them make recommendations. He would like baseline evaluations.

(Please see Recommendation List at end of these minutes.)

There was a discussion about access.

Fortier: This area is known for dust storms. There were 20-car pileups when the Interstate was first opened.

Gussenhoven: We will address BMP and State regulatory standards for PM10's.

Perfect: What is the public process when we pick up these issues?

Lawson: Well, we haven't done this yet but in general we'll follow the path set up by CERCLA. We did do some door-to-door stuff on the BCR.

Moreen: Yes, for Big Creek, there was door knocking and public notices in lieu of public gatherings. This seemed to work well for the community.

Johnson: It is important to go to the citizens then the CCC and Basin Commission, in that order, out of respect to the citizens.

Lawson to Perfect: What does ITD do?

Perfect: We hold public meetings where we present the project and ask the public for comments. We then deal with the comments on a one-on-one basis after that.

Fortier: Recommends speaking with Bill Scudder of the Mission in Cataldo.

Gussenhoven: Reviewed the flow chart from the presentation.

Lawson: Asked for feedback about the timing of the making presentations to the TLG and CCC and making the citizen contacts.

Ahlers to Moreen: At what point would the ACOE real estate people get involved?

Johnson: Immediate stake holders should be contacted first.

Discussion ensued regarding community involvement. It was recommended to help people see the finished project and help them compare this project to the size of the CIA so that they might get an idea of the scope.

Lawson: Felt we should wait on a conceptual design until after citizen, TLG and CCC review?

Discussion ensued about public acceptance and how the site was selected.

Johnson thought Gussenhoven's previous consumer survey helped people understand why that was the best site or the site that was being looked at.

Johnson: You don't want to cram this project down people's throats.

#### East Mission Flats

Start to develop briefing memo.

Cultural resources review

Speak to landowner and discuss legal ramifications

Touch base with local residents

Discussion ensued about flood levels.

Moreen: Would like to capture what process has occurred so far to get to this point.

## Recommendation List

- Check into Brownfields options
- Cultural affairs– CDA tribe input early in process
  - State parks history
  - Avista study
  - Photo records
  - ITD construction easement drawings
- Continue groundwater and surface water evaluations.
- Check surface water vs. groundwater levels
- Look into easement issues. Access control through ITD.
- Easement and access control through ITD.
  - Compare purchase vs. lease costs for easement & access control. Could be high.
- Investigate other legal issues
  - Lease arrangements vs. long term O&M
  - ICP as part of buy/sell/lease.
  - Potential for a bond?
- ESA? EA?
- Public notice/community involvement
  - Door-to-door survey
  - Open forum
- County Commissioners then Basin Commission
- Talk with Bill Scudder of the Mission
- FEMA information

## BREAK

John Lawson of IDEQ gave a PowerPoint presentation entitled Big Creek Repository, 2004 Field Season Update.

## Big Creek Repository Slide Show Overview

- No injury accidents in 2003
- Annual budget planned for ~25K cy of yard wastes to site
- Actual volumes in excess of 50K cy
- Operations required a full time dozer operator and a full time attendant at the decontamination station to facilitate dumping.
- BCR was operated 10 hrs/day, 5 days/week
- Access was controlled by contractors
  
- Over 50,000 cy of materials were placed in the BCR in 2003
- There was one main multimillion dollar contract with a local contractor to do remedial work on yards in the CDA Basin.
- There were over a dozen different local subs working under the main contract.
  
- Monitoring records show that no changes were observed in surface water quality in Big Creek or in the groundwater under or adjacent to the site.
- Eight different wells were extended by 10 ft each to provide for changes in the repository.
- Five pair of original wells were abandoned in 2003 as they were in the path of construction and were deemed not effective by USACE Hydrologists.
- Installed 9 settlement monuments that are measured monthly.
  
- Piezometer wells were monitored for internal pore pressures of the tailing material.

- Materials were taken from Wallace, Osburn, Burke, Kingston, Big Creek, Elk Creek, Silverton and Mullan.
- Stream bank stabilization wastes were taken from river bank projects coordinated by the USACE, ID F&G and DEQ.
- Concrete from past projects was buried on-site following engineering evaluations.
- Wood materials were chipped on site and will be placed in thin lifts on site.
- Wood materials were grinded up on site
- Winter closure activities included:
  - 3,000 ft of silt fence
  - Three acres of hydro seeding on side slopes
  - Placed materials to drain away from side slopes and Big Creek
  - Decon station was cleaned in preparation for the new year – it was cleaned eight to ten times during the year.
- Drainage was controlled to route storm water away from Big Creek.

Questions:

Moreen: What are the latest counts?

Lawson: 86,000 cy by truck loads which were then compacted. That equals over 50,000 cy from May 17 through present.

Ahlers to Lawson: What were previous year's volumes?

Lawson: Both 2002 and 2003 are described in annual reports – but in general, both had about 20K cy of material deposited at the BCR. So 2004 is a banner year and required a lot more attention and more funds that were anticipated. It's difficult since this is our only repository site.

Fortier: Spoke regarding wastes on Nabob tailing pond and his vast experience with BLM remediation in the Pine Creek drainage.